

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2003-NE-61-AD; Amendment 39-13879 AD 2004-24-03]

RIN 2120-AA64

Airworthiness Directives; Hamilton Sundstrand Power Systems T-62T Series Auxiliary Power Units (APUs)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for Hamilton Sundstrand Power Systems Models T-62T-46C12 and T-62T-40C14 (APS 500R) APUs with fuel filter housing assembly, part number (P/N) 4951627, 4951960, or 4952039, installed. This AD requires installation of a bracket to prevent a failed bypass button from protruding beyond the internal o-ring seal. This AD results from reports of leaks caused by cracked bypass buttons that protruded beyond the o-ring seal. We are issuing this AD to prevent a fire or explosion caused by a fuel leak from a failed bypass button on the fuel filter housing.

DATES: This AD becomes effective January 3, 2005. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of January 3, 2005.

ADDRESSES: You can get the service information identified in this AD from Hamilton Sundstrand Technical Publications Department, P.O. Box 7002, Rockford, IL 61125-7002, U.S.A.

You may examine the AD docket at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA. You may examine the service information, at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

FOR FURTHER INFORMATION CONTACT: Roger Pesuit, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3960 Paramount Blvd., Lakewood, CA 90712-4137; telephone (562) 627-5251, fax (562) 627-5210.

SUPPLEMENTARY INFORMATION: The FAA proposed to amend 14 CFR part 39 with a proposed airworthiness directive (AD). The proposed AD applies to Hamilton Sundstrand Power Systems Models T-62T-46C12 and T-62T-40C14 (APS 500R) APUs with fuel filter housing assembly, P/N 4951627, 4951960, or 4952039 installed. We published the proposed AD in the Federal Register on May 7, 2004 (69 FR 25525). That action proposed to require installation of a bracket to prevent a failed bypass button from protruding beyond the internal o-ring seal.

Examining the AD Docket

You may examine the AD Docket (including any comments and service information), by appointment, between 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays. See ADDRESSES for the location.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments received.

Request To Add Alert Service Bulletin Reference

Two commenters request that for APUs Model T-62T-40C14 (APS 500R), we add EMBRAER Alert Service Bulletin (ASB) No. 145-49-A027, dated January 6, 2004, as another means of complying with the AD. We do not agree. That ASB does not contain instructions for installing the bracket, but only instructs the operator to use Hamilton Sundstrand ASB No. ASB-4504112-49-22, for installing the bracket. Because of this, we have not incorporated by reference that ASB.

Request To Reference the Latest ASB Revision

One commenter requests that we reference the latest revision of Hamilton Sundstrand ASB No. ASB-4504112-49-22, which is Revision 1, dated January 5, 2004. The commenter states that the original ASB specified a gap dimension of 0.32 inch-to-0.65 inch, which is incorrect and unachievable. ASB Revision 1 corrects the gap dimension to the proper value of 0.50 inch, plus or minus 0.015 inch. Also, ASB Revision 1 increases the recommended compliance threshold from within 400 hours time-in-service (TIS) to within 500 hours TIS.

We agree that the latest ASB Revision should be referenced, which is Revision 2, dated October 4, 2004. The 500 hours TIS threshold is consistent with EMBRAER ASB No. 145-49-A027, dated January 6, 2004. ASB Revision 2 requires, as does this AD, that brackets installed using Hamilton Sundstrand ASB No. ASB-4504112-49-22, Original issue, be inspected one time for proper gap and adjusted if necessary. ASB Revision 2 also introduces as an alternative, the installation of a different part number fuel filter assembly for APU Model T-62-T-40C14, that is designed to prevent bypass button failure. We have added that alternative as optional terminating action for APU Model T-62-T-40C14.

We are allowing previous credit for brackets installed using Hamilton Sundstrand ASB No. ASB-4504112-49-22, Original, dated December 2, 2003, or Revision 1, dated January 5, 2004, before the effective date of this AD. We have incorporated the changes described previously in this AD.

Conclusion

We have carefully reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously.

We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Costs of Compliance

There are about 552 Hamilton Sundstrand APUs of the affected design in the worldwide fleet. We estimate that 448 APUs installed on airplanes of U.S. registry will be affected by this AD. We also estimate that it would take about 1 work hour per APU to perform the actions, and that the average labor rate is \$65 per work hour. Required parts will cost about \$517 per APU. The manufacturer indicated that they might provide the parts at no cost. Based on these figures, we estimate the total cost of the AD to U.S. operators to be \$260,736.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under ADDRESSES. Include "AD Docket No. 2003-NE-61-AD" in your request.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2004-24-03 Hamilton Sundstrand Power Systems: Amendment 39-13879. Docket No. 2003-NE-61-AD.

Effective Date

- (a) This AD becomes effective January 3, 2005.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Hamilton Sundstrand Power Systems Models T-62T-46C12 and T-62T-40C14 (APS 500R) auxiliary power units (APUs) with fuel filter housing assemblies, part numbers (P/Ns) 4951627, 4951960, or 4952039, installed. These APUs are installed on, but not limited to, Bombardier DHC-8-400 airplanes and Empresa Brasileira de Aeronautica S.A. (EMBRAER) EMB-135 and -145 series airplanes.

Unsafe Condition

(d) This AD results from reports of leaks caused by cracked bypass buttons that protruded beyond the o-ring seal. We are issuing this AD to prevent a fire or explosion caused by a fuel leak from a failed bypass button on the fuel filter.

Compliance

(e) You are responsible for having the actions required by this AD performed within 500 hours time-in-service or 6 months after the effective date of this AD, whichever occurs earlier, unless the actions have already been done.

Installation of Bracket on APU Model T-62T-46C12

(f) Install a bracket onto the fuel filter housing assembly on APU Model T-62T-46C12. Use 2.A through 2.D of the Accomplishment Instructions of Hamilton Sundstrand Alert Service Bulletin (ASB) No. ASB-4503067-49-9, dated December 2, 2003, to install the bracket.

Installation of Bracket on APU Model T-62T-40C14 (APS 500R)

(g) Install a bracket onto the fuel filter housing assembly on APU Model T-62T-40C14 (APS 500R). Use 2.B. and 2.D.(1) of the Accomplishment Instructions of Hamilton Sundstrand ASB No. ASB-4504112-49-22, Revision 2, dated October 4, 2004, to install the bracket.

Previous Credit

(h) Previous credit is allowed for brackets installed using Hamilton Sundstrand ASB No. ASB-4503067-49-9, dated December 2, 2003, Hamilton Sundstrand ASB No. ASB-4504112-49-22, Original, dated December 2, 2003, or Revision 1, dated January 5, 2004, before the effective date of this AD.

One-Time Inspection for Proper Gap

(i) For brackets previously installed using Hamilton Sundstrand ASB No. ASB-4504112-49-22, Original, dated December 2, 2003, perform a one-time inspection for proper gap and if necessary, adjust the gap between the bracket and bypass button. Use 2.B. and 2.D.(1) of the Accomplishment Instructions of Hamilton Sundstrand ASB No. ASB-4504112-49-22, Revision 2, dated October 4, 2004 to inspect and adjust the gap.

Optional Terminating Action for APU Model T-62T-40C14 (APS 500R)

(j) For APU Model T-62T-40C14 (APS 500R), installation of a part number fuel filter assembly that is not listed in this AD constitutes optional terminating action to the requirements of this AD.

Alternative Methods of Compliance

(k) The Manager, Los Angeles Aircraft Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Material Incorporated by Reference

(l) You must use the Alert Service Bulletins listed in Table 1 of this AD to perform the bracket installations required by this AD. The Director of the Federal Register approved the incorporation by reference of the documents listed in Table 1 of this AD in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You can get a copy from Hamilton Sundstrand Technical Publications Department, P.O. Box 7002, Rockford, IL 61125-7002, U.S.A. You can review copies at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. Table 1 follows:

TABLE 1.—INCORPORATION BY REFERENCE

Alert service bulletin No.	Page number(s) shown on the page	Revision level shown on the page	Date shown on the page
Hamilton Sundstrand ASB-4503067-49-9	All	Original	December 2, 2003.
Hamilton Sundstrand ASB-4504112-49-22	All	2	October 4, 2004.

Related Information

(m) None.

Issued in Burlington, Massachusetts, on November 15, 2004.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 04-25792 Filed 11-24-04; 8:45 am]

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